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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,456	10/17/2003	Randy C. Frye	60130-1815; 03MRA0139	3033
26096 7.	7590 11/17/2005		EXAMINER	
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD			ABDELWAHED, ALI F	
SUITE 350			ART UNIT	PAPER NUMBER
BIRMINGHAM, MI 48009			3722	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

				C.				
Office Action Summary		Application No.	Applicant(s)					
		10/688,456	FRYE ET AL.					
		Examiner	Art Unit					
		Ali Abdelwahed	3722					
Period fo	The MAILING DATE of this communication apports Reply	pears on the cover si	neet with the correspondence a	ddress				
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailin ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COM 136(a). In no event, however will apply and will expire SIX e, cause the application to be	MUNICATION. The may a reply be timely filed MONTHS from the mailing date of this come ABANDONED (35 U.S.C. § 133).	•				
Status '								
1)⊠	Responsive to communication(s) filed on <u>01 S</u>	September 2005.						
2a)⊠	☐ This action is FINAL . 2b)☐ This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under E	Ex parte Quayle, 193	85 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims							
4)🖂	4) Claim(s) 1-22 is/are pending in the application.							
	4a) Of the above claim(s) is/are withdra	wn from consideration	on.					
5)⊠	☑ Claim(s) <u>21 and 22</u> is/are allowed.							
6)⊠	☑ Claim(s) <u>1-3,8-17 and 20</u> is/are rejected.							
7)🖂	Claim(s) <u>4-7,18 and 19</u> is/are objected to.							
8)[8) Claim(s) are subject to restriction and/or election requirement.							
Applicat	ion Papers							
9)[The specification is objected to by the Examine	er.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11)	The oath or declaration is objected to by the Ex	xaminer. Note the at	tached Office Action or form P	TO-152.				
Priority (under 35 U.S.C. § 119							
12)	Acknowledgment is made of a claim for foreign	n priority under 35 U	S.C. § 119(a)-(d) or (f).					
	☐ All b)☐ Some * c)☐ None of:	, p	3 (2) (2) (.).					
ŕ	1. Certified copies of the priority document	ts have been receive	ed.					
	2. Certified copies of the priority document							
	3. Copies of the certified copies of the prior	ority documents have	been received in this Nationa	ıl Stage				
	application from the International Burea	u (PCT Rule 17.2(a)).					
* 5	See the attached detailed Office action for a list	of the certified copi	es not received.					
Attachmen	ut(e)							
_	ce of References Cited (PTO-892)	4) 🗀 Int	erview Summary (PTO-413)					
2) Notic	ce of Draftsperson's Patent Drawing Review (PTO-948)	Pa	per No(s)/Mail Date					
. —	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date	_	tice of Informal Patent Application (P7 ner:	O-152)				

Application/Control Number: 10/688,456

Art Unit: 3722

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 8, 9, 11-17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,706,506 to Dorak.

Dorak discloses a cutting machine comprising: a lead screw assembly (34) having a tool holder (22), first (12) and second (58) motors; and a coupling assembly interconnecting the first and second motors to the lead screw assembly for selectively transmitting rotational drive from the first and second motors to the lead screw assembly (see fig.1, and Abstract). The coupling assembly having a first engaged condition rotationally coupling the first motor to the lead screw assembly moving the tool holder in a first direction, and a second engaged condition rotationally coupling the second motor to the lead screw assembly moving the tool holder in a second direction opposite the first direction (see columns 1, 3, and 4, lines 57-65, 56-67, and 28-33, respectively). The first and second motors each include a rotational axis with the rotational axes parallel to one another (see fig.1), and wherein the rotational axes are parallel to a lead screw assembly axis (see fig.1). The first and second motors are simultaneously rotationally driven with the tool holder moving between the first and second directions (see columns 1, 3, and 4, lines 57-65, 56-67, and 28-33, respectively). The coupling

assembly includes at least one clutch/brake (38), and a controller (50) commands the at least one clutch brake to obtain at least one of the first and second engaged condition (see column 3, lines 49-55). The lead screw is arranged between the tool holder and the drive motors (see fig.1). A cutting tool (24) driven by the tool holder rotates in a first direction and rotates in an opposed second direction such that the cutting tool cuts threads in a work piece (26) and is removed from the work piece (see columns 2 and 4, lines 1-21 and 28-33, respectively).

Furthermore, given that the Dorak reference discloses all of the claimed structural limitations of the above claims, the Dorak reference therefore is assumed to be capable of performing all of the claimed functions of the above claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dorak in view of U.S. Patent No. 5,165,828 to Green et al.

Dorak discloses the claimed invention except for lead screw assembly position sensors connected to the controller providing lead screw assembly position information, and the controller commanding at least one clutch/brake in response to the lead screw assembly position information. However, Green et al. teaches a cutting machine

Art Unit: 3722

comprising lead screw assembly position sensor connected to the controller providing lead screw assembly position information (see column 4, lines 12-17), and the controller (21) commanding at least one clutch/brake in response to the lead screw assembly position information (see column 5, lines 44-51). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cutting machine of Dorak, in view of Green et al., such that it would provide the cutting machine of Dorak with the concept of the aforementioned limitations for the purpose of providing the controller with information regarding the position of the lead screw assembly with respect to the work piece in order to allow the controller to determine whether or not to apply the clutch/brake in response to the lead screw assembly position information.

Response to Arguments

Applicant's arguments filed on September 1, 2005 have been fully considered but they are not persuasive.

In response to Applicant's argument concerning the Dorak reference not teaching the claimed limitations of the first and second motors rotatably driving the tool holder in a first and opposite second direction, respectively. In column 2, lines 1-21 of the Dorak reference teaches the first motor 12 rotatably driving the tool holder 22 in a first direction. In column 4, lines 28-33 of the Dorak reference teaches the second motor 58 rotatably driving the tool holder in an opposite second direction via the lead screw

Art Unit: 3722

assembly 34; "motor 58 which will cause the reverse rotation of the lead screw until it is fully retracted".

Page 5

In response to Applicant's argument concerning the Dorak reference not teaching the claimed limitations of the first and second motors being driven simultaneously while transferring the rotational drive from the first drive motor to the second drive motor.

Column 4, lines 1-33 of the Dorak reference teaches the first motor 12 being driven simultaneously with the second motor 58 through the recitation of the spindle 16, which is coupled to the fist motor, is still being turned while the second motor begins its retraction operation of the lead screw by reversing the rotation of the lead screw until it is fully retracted from the work piece. The transferring of rotational drive from the first drive motor to the second drive motor is achieved via the engagement and disengagement of the clutch assembly 36, 38 through the use of hydraulic pistons that are controlled by the control box 50.

Allowable Subject Matter

Claims 21 and 22 are allowed.

Claims 4-7, 18, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Abdelwahed whose telephone number is (571) 272-4417. The examiner can normally be reached Monday through Friday from 10:00 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the examiner or the examiner's supervisor.

HH AA 11/02/2005

> BOYER D. ASHLEY PRIMARY EXAMINER